

### **Claims**

What is claimed is:

1. A workflow scheduler graphical user interface program comprising:  
a first screen area adapted to allow a user to create a graphical representation of a business workflow process; and  
a second screen area adapted to allow a user to bind the graphical representation of a business workflow process to at least one technological component.
2. The program of claim 1, further including a separator bar separating the first screen area from the second screen area.
3. The program of claim 1, further comprising a workflow component menu including a plurality of workflow components adapted to allow a user to create a business workflow process in the first screen area.
4. The program of claim 3, the plurality of workflow components comprising at least one action component for defining actions in a business workflow process and at least one action grouping component for grouping the at least one action component.
5. The program of claim 4, the at least one action grouping component being a role component.
6. The program of claim 4, the at least one action grouping component being a transaction component.
7. The program of claim 6, further including an editable transaction property screen adapted to provide a user with the ability to relate catch code and compensation code to the transaction component.

8. The program of claim 3, the plurality of workflow components comprising at least one decision component for providing decision control flow to the business workflow process.

9. The program of claim 8, further including an editable decision component property screen adapted to provide a user with the ability to add and delete rules to the decision component.

10. The program of claim 9, further including an editable rule property screen adapted to provide a user with the ability to define the rules added to the decision component.

11. The program of claim 3, the plurality of workflow components comprising at least one of an action component, an action grouping component, a branching component, a joining component and a decision component.

12. The program of claim 1, further comprising a binding component menu including a plurality of technological components adapted to allow a user to bind the graphical representation of the business workflow process to at least one of the plurality of technological components in the second screen area.

13. The program of claim 12, further comprising a message editor for each of the plurality of technological components.

14. The program of claim 12, the plurality of technological components comprising at least one of a COM component, a script component, a message queue component and a schedule component.

15. The program of claim 1, the program being adapted to provide at least one implementation port coupling at least one workflow component to at least one technological component.

16. The program of claim 15, further including a data flow screen illustrating data flow between the at least one implementation port and the at least one technological component.

17. The program of claim 15, the at least one implementation port being provided by dragging the at least one technological component into the second screen area using a user selection device.

18. The program of claim 15, further including an editable port references message properties screen adapted to provide a user with the ability to reorder implementation ports.

19. The program of claim 18, the editable port references message properties screen being further adapted to allow a user to launch an editable port properties screen, the editable port properties screen being adapted to allow a user to add, delete and edit port messages and arguments.

20. The program of claim 1, further including a binding wizard for defining the at least one technological component, the binding wizard being invoked by dragging the at least one technological component into the second screen area with a user selection device.

21. The program of claim 1, the program being adapted to convert the graphical representation of the business workflow process into executable code.

22. A business process scheduling program comprising:  
a plurality of schedule tool components adapted to allow a user to create a representation of a business process schedule according to a set of predefined rules; and  
a conversion component adapted to convert the schedule created by the user to executable code.

23. The program of claim 22, further comprising at least one binding tool

component adapted to allow a user to bind the representation of the business process schedule to at least one technological component.

24. The program of claim 22, further including an input screen for inputting interfaces and methods of the at least one technological component.

25. The program of claim 22, further including a data flow connection sheet screen adapted to allow a user to view data flow between the business process schedule and the at least one technological component.

26. The program of claim 22, the plurality of schedule tool components comprising at least one action component for defining actions in a business process schedule and at least one action grouping component for grouping the at least one action component.

27. The program of claim 26, the actions grouped by the at least one action grouping component are selectable between an associated state and a non-associated state.

28. The program of claim 27, a control flow flowing to an action grouped by an action grouping component having an associated state will automatically connect to a connection point on the action grouping component.

29. The program of claim 26, a control flow flowing to an action component grouped by an action grouping component having a non-associated state will allow a direct connection to a connection point on the action component.

30. The program of claim 26, an action grouping component having a non-associated state will not have a control handle for directing control flow wherein an action component having an associated state will have a control handle for directing control flow.

31. The program of claim 26, wherein a connection between a first action grouping component having at least one action associated with the first action grouping

component and a second action grouping component having at least one action associated with the second action grouping component will automatically generate a first grouping component port on the first action grouping component and a second grouping component port on the second action grouping component on the second action grouping component and a communicates message coupling the first grouping component port to the second grouping component port.

32. The program of claim 31, wherein deletion of one of the first action grouping component and the second action grouping component creates an implementation port of the deleted action grouping component on a separator bar.

33. The program of claim 26, wherein a control flow flowing from an action grouped by an action grouping component having an associated state to an implementation port will automatically create a grouping component port on an edge of the action grouping component.

34. The program of claim 26, the at least one action grouping component allowing only a single control flow to flow into the at least one action grouping component.

35. The program of claim 34, the at least one action grouping component being a transaction component and further including at least one of a catch code and a compensation code related to the transaction component.

36. The program of claim 35, the transaction component being limited to two nesting levels.

37. The program of claim 22, the plurality of schedule tool components comprising at least one decision component having at least one non-editable rule.

38. The program of claim 37, the at least one decision component allowing for the addition of other rules.

39. A computer readable medium having computer-executable instructions for performing the steps comprising:

displaying a screen having a first region adapted to allow a user to create a representation of a business workflow process and a second region adapted to allow a user to bind the representation of a business workflow process to a representation of at least one technological component.

40. The method of claim 39, further comprising the step of displaying a separator bar between the first screen area and the second screen area.

41. The method of claim 39, further comprising the step of displaying a workflow component menu including a plurality of workflow components adapted to allow a user to create a business workflow process.

42. The method of claim 41, further including the step of retrieving and inserting an image into the first screen area of a selected one of the plurality of workflow components in response to a user selecting the component and dragging the component into the first screen area using a user selection device.

43. The method of claim 39, further including the step of displaying an editable transaction property screen adapted to provide a user with the ability to relate catch code and compensation code to a transaction component in response to a user selecting a transaction component residing in the first screen area using a user selection device.

44. The method of claim 39, further including the step of displaying an editable decision component property screen adapted to provide a user with the ability to add and delete rules to a decision component in response to a user selecting a decision component residing in the first screen area using a user selection device.

45. The method of claim 44, further including the step of displaying an editable

rule property screen adapted to provide a user with the ability to define the rules added to the decision component in response to a user selecting a button on the editable decision component property screen using a user selection device.

46. The method of claim 39, further comprising the step of displaying a binding component menu including a plurality of technological components adapted to allow a user to bind the graphical representation of the business workflow process to at least one of the plurality of technological components.

47. The method of claim 46, further including the step of displaying a message editor in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device.

48. The program of claim 46, further including the step of displaying a binding wizard in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device.

49. The method of claim 46, further including the step of retrieving and displaying an implementation port image adapted to bind a technological component to a component in a business workflow process in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device.

50. The method of claim 46, further including the step of displaying an editable port references message properties screen adapted to provide a user with the ability to reorder implementation ports.

51. The method of claim 50, further including the step of launching an editable port properties screen, the editable port properties screen being adapted to allow a user to add, delete and edit port messages and arguments.

52. The method of claim 39, further including the step of converting the graphical representation of the business workflow process into executable code.

53. A system for facilitating modeling of business processes comprise of a plurality of business operations being representable at a transaction level and an action level, the system comprising a computer-readable medium and a plurality of computer-executable components, the components comprising:

a graphical user interface; and

a plurality of modeling components accessible through the graphical user interface and adapted to allow a user to create a graphical representation of a business process and a binding of the business process to at least one technological component.

54. The system of claim 53, at least a portion of the plurality of modeling components residing on a workflow component menu adapted to allow a user to create the graphical representation of a business workflow process in a first screen area.

55. The system of claim 53, at least a portion of the plurality of modeling components residing on a binding component menu adapted to allow a user to create a binding to the graphical representation of the business workflow process in a second screen area.

56. The system of claim 53, further including at least one implementation port coupling at least one component of the graphical representation of the business process to the at least one technological component

57. The system of claim 56, further including a data flow screen illustrating data flow between the at least one implementation port and the at least one technological component.

58. The system of claim 53, the system being adapted to convert the graphical representation of the business workflow process into executable code.



59. A graphical user interface program comprising:  
means for allowing a user to create a graphical representation of a business process;  
and  
means for allowing a user to create a binding of the graphical representation of the  
business process to at least one technological component.

60. The system of claim 59, further including means for coupling at least one  
component the graphical representation of the business process to the at least one  
technological component.

61. The system of claim 60, further including means for viewing data flow  
between the means for coupling and the at least one technological component.

62. The system of claim 59, further including means for converting the graphical  
representation of the business process into executable code.